WHAT IS CLAIMED IS:

1. A neighbor cell notifying apparatus for notifying a mobile station of predetermined information in a mobile communication network for implementing radio communication utilizing a plurality of cells between the mobile station and a base station, the neighbor cell notifying apparatus comprising:

cell information extracting means for extracting neighbor cell information items for specifying respective neighbor cells corresponding to each of said plurality of cells;

cell rank determining means for, based on the neighbor cell information items extracted, determining ranks of neighbor cell information items that the mobile station is to be notified of, in favor of neighbor cell information items about neighbor cells common to a first cell and a second cell out of the plurality of cells; and

cell information notifying means for notifying the mobile station of a predetermined number of neighbor cell information items among said neighbor cell information items on the basis of the ranks determined.

2. A neighbor cell notifying apparatus for notifying a mobile station of predetermined information in a mobile communication network for implementing

radio communication utilizing a plurality of cells between the mobile station and a base station, the neighbor cell notifying apparatus comprising:

cell information extracting means for extracting neighbor cell information items for specifying respective neighbor cells corresponding to each of said plurality of cells;

cell rank determining means for determining ranks of neighbor cell information items that the mobile station is to be notified of, based on the neighbor cell information items extracted and on priority information items preliminarily determined for the respective neighbor cells; and

cell information notifying means for notifying the mobile station of a predetermined number of neighbor cell information items among said neighbor cell information items on the basis of the ranks determined.

3. The neighbor cell notifying apparatus according to Claim 2, wherein the cell rank determining means is configured to:

delete a neighbor cell information items about one of neighbor cells common to a first cell and a second cell out of the plurality of cells, based on the neighbor cell information items extracted by the cell information extracting means; and

determine the ranks of the neighbor cell information items that the mobile station is to be notified of, based on the neighbor cell information items after the deletion, and on the priority information items preliminarily determined for the respective neighbor cells.

4. The neighbor cell notifying apparatus according to Claim 2 or 3, wherein the priority information items are determined based on handover rates of the respective neighbor cells.

5. The neighbor cell notifying apparatus according to Claim 2 or 3, wherein the priority information items are determined based on numbers of mounted channels in the respective neighbor cells.

6. A neighbor cell notifying method of notifying a mobile station of predetermined information in a mobile communication network for implementing radio communication utilizing a plurality of cells between the mobile station and a base station, the neighbor cell notifying method comprising:

an extracting step wherein cell information extracting means extracts neighbor cell information items for specifying respective neighbor cells corresponding to each of said plurality of cells;

a determining step wherein, based on the neighbor cell information items extracted, cell rank determining

means determines ranks of neighbor cell information items that the mobile station is to be notified of, in favor of neighbor cell information items about neighbor cells common to a first cell and a second cell out of

5   the plurality of cells; and

a notifying step wherein cell information notifying means notifies the mobile station of a predetermined number of neighbor cell information items among said neighbor cell information items on the basis

10   of the ranks determined.

7. A neighbor cell notifying method of notifying a mobile station of predetermined information in a mobile communication network for implementing radio communication utilizing a plurality of cells between

15   the mobile station and a base station, the neighbor cell notifying method comprising:

an extracting step wherein cell information extracting means extracts neighbor cell information items for specifying respective neighbor cells

20   corresponding to each of said plurality of cells;

a determining step wherein cell rank determining means determines ranks of neighbor cell information items that the mobile station is to be notified of, based on the neighbor cell information items extracted

25   and on priority information items preliminarily determined for the respective neighbor cells; and

a notifying step wherein cell information notifying means notifies the mobile station of a predetermined number of neighbor cell information items among said neighbor cell information items on the basis of the ranks determined.